						_				
Substitute for form 1449/PTO					Complete if Known Application Number 10/770,115					
					Application Number					
IN	FORM	AFOR	1 DISCLOSI	JRE [Filing Date	Fel	February 2, 2004			
(Use as marmisheris as necessary)					First Named Inventor	EII	ingsrud et al.			
					Art Unit	280	62			
/	HILL O	4		-	xaminer Name					
Sheet	Sheet of 5				Attorney Docket Number	1101.111US02				
Gileot	1	ل	0,	1	I DOCUMENTS					
EXAMINER	Cite			U.S. FAILIT	Publication Date		Name of Patentee or Applica	nt		
INITIAL*	No.1	Document Number		MM-DD-YYYY		of Cited Document				
		Number-Kind Code ^{2 (if known)}								
131		US-5	,689,068		11/1997		Locatelli et al.			
	†		,563,513		10/1996		Tasei et al.			
		US-H	H1561		07/1996		Thompson			
		US-H	H1524		04/1996		Thompson et al.			
		US-5	,486,764		01/1996		Thompson et al.			
		US-H	H1490		09/1995		Thompson et al.	n et al.		
		US-5	,400,030		03/1995		Duren et al. Lee et al.			
		US-5	,373,443		12/1994					
		US-5	,280,284		01/1994		Johler			
		US-5	,192,952		03/1993		Johler			
		US-5	,177,445		01/1993		Cross			
		US-5	,025,218		06/1991		Ramstedt Parra et al.			
			,835,474		05/1989					
		US-4	,760,340		07/1988		Denzau et al. Safinya			
		US-4	,652,829		03/1987					
		US-4	,633,182		12/1986		Dzwinel			
		US-4	,617,518		10/1986		Srnka			
		US-4	,616,184		10/1986		Lee et al.			
		US-4	,594,551		06/1986		Cox et al.			
			FC	REIGN PATI	ENT DOCUMENTS	S.				
EXAMINER	Cite		Foreign Patent	Document	Publication Date					
INITIAL*	No. ¹	Country Code ³ Number ⁴ Kind Code ⁵		MM-DD-YYYY		Name of Patentee or Applicant of Cited Document	T ⁶			
15/2	 	CD 0	(if know	vn)	40/1000			 		
170	 		256715		12/1992			 		
	 		301902		12/1996			ļ		
			31/01617		06/1981			<u> </u>		
			96/06367		02/1996			 		
	 		98/28638		07/1998			ļ		
FY A MINIED			00/00850	· · · · · · · · · · · · · · · · · · ·	01/2000		/	<u></u>		
EXAMINER SIGNATURE		/	In l	Myly	DATE CONSIDERED	.	9/14/04			

copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include

Substitute for form 1449/PTO						Complete if Known					
						ation Number	10/	0/770,115			
(AV)	EOR	MOITA	N DISCLOSU		Filing [ling Date February 2, 2004					
TZ'O\	ATEM	ENT E	BY APPLICA	.NT	First Na	amed Inventor	Elli	ingsrud et al.			
STATEMENT BY APPLICANT (Use as many sheets as necessary)						t	286	52			
\ \ \mathref{y} \tag{2}						xaminer Name					
Sheet Tut telses of 5						y Docket Number	110	1101.111US02			
						•					
EXAMINER	Cite	U.S. PATENT			1 000	Publication Date		Name of Patentee or Applicant			
INITIAL*	No.1	Document Number		1	MM-DD-YYYY		of Cited Document				
				_							
		Number-Kind Code ^{2 (if known)}									
0,					+	(2002					
BC			,339,333			/2002 /2001		Kuo Vail III			
			,246,240 ,225,806			/2001 /2001					
			,188,222			/2001 /2001		Millar et al.			
			,188,221	· · · · · · · · · · · · · · · · · · ·		/2001		Seydoux et al.			
			,184,685			/2001		Van de Kop et al. Paulk et al.			
						/2001		Hagiwara et al.			
		US-6,181,138 US-6,163,155				/2000		Bittar			
	· · ·	US-6,157,195				2000		Vail, III			
		US-6,060,885			_	2000	-	Tabarovsky et al.			
	*	US-6,023,168				2000		Minerbo			
		US-6,002,357				1999		Redfern et al.			
		US-5,955,884				1999		Payton et al.			
			,892,361			1999		Meyer, Jr. et al.			
			,886,526			1999		Wu			
			,877,995			1999		Thompson et al.			
		US-5	,841,280		11/	1998		Yu et al.			
		US-5,	,811,973		09/	1998		Meyer, Jr.			
		US-5,	,767,679		06/	1998		Schroder			
			FO	REIGN PATI	ENT	OCUMENTS					
EXAMINER	Cite		Foreign Patent I	Document		Publication Date					
INITIAL*	No. ¹	Country Code ³ Number ⁴ Kind Code ⁵ (if known)		\dashv	MM-DD-YYYY		Name of Patentee or Applicant of Cited Document	Té			
							of Cited Document				
BI		EP 0087271			08/	1983					
		EP 0219234		04/	1987						
	EP 0512756		11/	1991							
		EP 08	14349		12/	1997	一				
		FR 24	79992		10/	1981					
GB 2155182				09/	1985		1 1				
EXAMINER SIGNATURE			By (Uplly		DATE CONSIDERED		7/14/04			

copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional).

See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) Ints collection or information is required by 37 CFR 1.97 and 1.98. The information is required to optain or retain a penetit by the public which is to the tand by the USF10 to process an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USF10. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete his form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if no in conformance and not considered. Include

	Subs	stitute for form 1449/	/PTO	Complete if Known				
				Application Number				
IN.	FORM.	ATION DISCLOSU	独山至沙	Filing Date	Febru	uary 2, 2004		
ST	ATEM	ient by appli g ai		First Named Inventor	Elling	Ellingsrud et al.		
	(Use as	s many sheets as necessary)	JUH 9 8 2004	Art Unit 2862				
		\F.	2011 - 2001	Examiner Name				
Obast	Т,	1.6	<u> </u>	Attorney Docket Number	1101	.111US02		
Sheet	3	of			110	1110302		
	~	· · · · · · · · · · · · · · · · · · ·	U.S. PATEN	T DOCUMENTS		A11		
EXAMINER INITIAL*	Cite No. ¹	Document No	lumber	Publication Date MM-DD-YYYY		Name of Patentee or Applicant of Cited Document		
,	1 /	Number-Kind Co	ode ² (if known)	\dashv				
	1 1	Trained and	IGC .					
Br		US-4,547,733		10/1985	7	Thoraval		
<u> </u>		US-4,506,225	<u>.</u>	03/1985	I	Loveless et al.		
		US-4,451,789		05/1984		Meador		
		US-4,446,434		05/1984	5	Sternberg et al.		
	i!	US-4,417,210		11/1983		Rocroie t al.		
		US-4,308,499		12/1981		Thierbach et al.		
		US-4,258,322		03/1981		Rocroi et al.		
		US-4,258,321		03/1981		Neale, Jr.		
		US-4,079,309		03/1978		Seeley		
		US-4,047,098		09/1977		Duroux		
	,	US-4,010,413		03/1977		Daniel		
		US-3,806,795		04/1974		Morey		
		US-3,052,836		09/1962		Postma		
		US-2,531,088		11/1950		Thompson	•	
		US-2,077,707		04/1937		Melton		
	,	US-						
		US-						
		US-	<u> </u>		\neg			
T		US-						
		FOI	1.00	ENT DOCUMENTS				
EXAMINER INITIAL*	Cite No.1	Foreign Patent D		Publication Date MM-DD-YYYY		Name of Patentee or Applicant	Té	
		Country Code ³ Number (if known		7		of Cited Document		
PSC		WO 00/13037	<u></u>	03/2000				
		WO 00/13046		03/2000				
		WO 00/63718		10/2000				
		WO 01/55749	•	08/2001				
		<u> </u>						
		,				, ,		
EXAMINER SIGNATURE		But U	Mym	DATE CONSIDERED		9/14/04		

copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English

language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

· _											
Substitute for form 1449/PTO						Complete if Known					
					Applica	tion Number	10/770,115				
			N DISCLOS		Filing D	Date	February 2, 2004				
ST.			BY APPLICATE (SEE 18 18 18 18 18 18 18 18 18 18 18 18 18	ANT S	First Na	med Inventor	Ellingsrud et al.				
	(Use a.	s many sne	eeis as necessary)	JUN 0 8 2004	Art Uni	t	2862	'			
			\.	S	Examin	er Name					
Sheet	4	of Attorney Docket Number 1101.111US02									
NON PATENT LITERATURE DOCUMENTS											
EXAMINER Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the								T ²			
INITIAL*	No. ¹	item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published									
Br		Elling	gsrud et al.,	"How Electro	magnet	ic Sounding Te	chnique Could be Coming				
1,70		to Hy	drocarbon	E & P", 20 Fir	st Brea	k (March 2002)).				
		Eides	mo et al., "	Sea Bed Loggi	ng (SBI	L), a new metho	od for remote and direct				
[]		identi	ification of l	hydrocarbon fi	lled lay	ers in deepwat	er areas", 20 First Break				
			ch 2002).								
							he Surface of a Medium				
1 1			_	n Resistant La	<i>yer"</i> , Fi	requency and T	Fransient Soundings, publ.				
			Elsevier, (1983).								
			Kaufman et al., 1981 Annual Meeting Abstracts: Marine EM Prospecting								
			System, 47 Geophysics 431 (1982). Garg et al., "Synthetic Electric Sounding Surveys Over Known Oil Fields", 49								
				<i>netic Etectric</i> -67 (Novembe			r Known Oil Fields", 49				
							s Through Electrical				
1							ophys. Res. Letts. 204-217				
			ust 15, 2000				·				
		Edwa	ards, "On the	e Resource evo	luation	of Marine Gas	s Hydrate Deposits Using				
		Sea-F	Floor Transi	ent Electric D	ipole-D	ipole Methods	", 62 Geophysics 63-74				
	·		ary 1997).								
							on of ULF/ELF				
							eptember 1990).				
							Electromagnetic Sounding				
							1-1106 (April 2000).				
		MacGregor et al., "Marine Controlled Source Electromagnetic Sounding: Development of a Regularized Inversion for 2-Dimensional Resistivity									
1 1											
		Structures", 1 LITHOS Science Report 103-109 (April 1999). MacGregor et al., "The RAMESSES Experiment – III. Controlled-Source									
			-								
			_	Sounaing of th	e Keykji	anes Kidge", l	35 Geophys. J. Int. 773-89				
EXAMINER	لــــــــــــــــــــــــــــــــــــــ	(July	1998).	1 1 - 11	11/	DATE					
SIGNATURE			1500	(Wy)		CONSIDERED	9/14/04				

*EXAMINER: Initial if reference considered, whether or not estation is in conformance with MPEP 609. Draw line through ditation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

					Complete ICV								
Substitute for form 1449/PTO					Complete if Known								
					Application Number	10/770,115							
			DISCLOS		Filing Date	February 2, 2004							
J ST			SY APPLIC tets as necessary)		First Named Inventor	Ellingsrud et al.							
ļ	(036 12	many sne	ers as necessary)	MUK B G MUL	Art Unit	2862							
			1	ZON OB WINK	Examiner Name								
Sheet	5		of	\$	Attorney Docket Number	1101.111US02							
NON PATENT LITERATURE DOCUMENTS													
EXAMINER	Cite	Inclu	ide name of the	author (in CAPITA	L LETTERS), title of the art	ticle (when appropriate), title of the	T ²						
INITIAL*	No. ¹	item	(book, magazin		mposium, catalog, etc.), date city and/or country where pul	e, page(s), volume-issue number(s), blished							
.0.		Sinah	et al., "Ma	gmatic Proces	ses at Slow Spreading	Ridges: Implications of							
I <i> 41</i>		the RAMESSES Experiment at 57 deg. 45'N on the Mid-Atlantic Ridge," 135											
M M			Geophys. J. Int. 731-45 (July 1998).										
121						h the Slow-Spreading Mid-							
11//					s. R. Soc. Lond. A 23								
				, e									
				 									
		<u> </u>			· · · · · · · · · · · · · · · · · · ·								
, i													
		<u> </u>	· ·										
	İ						•						
						•							
-		··											
			h .			/ /							
EXAMINER SIGNATURE		. /	140	ler, a	DATE CONSIDERED	9/14/04							
	Initial if 1	eference	considered, wh	ether or not citation		EP 609. Draw line through citation if no	t in						

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.